



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Raynor Garage Doors
1101 East River Road, P.O. Box 448
Dixon, IL 61021

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Steelform Standard 24 and 20 Gauge Steel Sectional Garage Door up to 18'-2" wide

APPROVAL DOCUMENT: Drawing No. P-3313, titled "Spec, Wind Load Steelform Standard 24 and 20 Gauge", sheets 1 through 4 of 4, dated 02/25/2010, with revision C dated 01/18/2011, prepared by the manufacturer, signed and sealed by Richard A. Baumann, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: A permanent label with the manufacturer's name or logo, manufacturing address, model number, the positive and negative design pressure rating, indicate impact rated if applicable, installation instruction drawing reference number, approval number (NOA), the applicable test standards, and the statement reading 'Miami-Dade County Product Control Approved' is to be located on the door's side track, bottom angle, or inner surface of a panel.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 12-0517.17 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.



[Signature]
11/09/2015

NOA No. 15-0714.05
Expiration Date: March 10, 2016
Approval Date: November 19, 2015
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS “Submitted under NOA # 10-0921.06”

1. Drawing No P-3313, titled “Spec, Wind Load Steelform Standard 24 and 20 Gauge”, sheets 1 through 4 of 4, dated 02/25/2010, with revision C dated 01/18/2011, prepared by the manufacturer, signed and sealed by Richard A. Baumann, P.E.

B. TESTS “Submitted under NOA # 10-0921.06”

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
Along with marked-up drawings and installation diagram of 110”, 146” and 218” Wide Steelform Sectional Garage Doors, prepared by Hurricane Test Laboratory, LLC, Test Report No. G493-0301-10, dated 08/10/2010, signed and sealed by Vinu J. Abraham, P.E.
2. Test report on Forced Entry Resistance Test, per FBC 2411 3.2.1, TAS 202-94 of two (one TradeMark and one Showcase) 16’x 7’ Sectional Garage Doors, prepared by Hurricane Test Laboratory, LLC, Test Report No. G493-0706-10, dated 08/10/2010, signed and sealed by Vinu J. Abraham, P.E.
3. Test report on Tensile Test per ASTM E8, of steel sheet, prepared by Certified Testing Laboratories, Test Report No. 0205T, dated 03/30/2010, signed and sealed by Ramesh Patel, P.E.
4. Test report on Salt Spray per ASTM B117-90 of painted G40 galvanized painted steel, prepared by Wendler Engineering Services, Inc., dated 09/17/2010, signed and sealed by Richard A. Baumann, P.E.

C. CALCULATIONS “Submitted under NOA # 10-0921.06”

1. Jamb attachment verification calculations, prepared by Wendler Engineering Services, Inc., dated 09/16/2010, signed and sealed by Richard A. Baumann, P.E.

D. QUALITY ASSURANCE

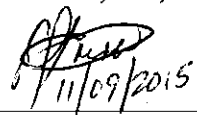
1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

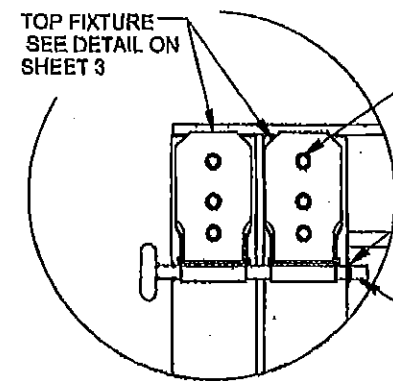
F. STATEMENTS

1. Statement letter of code conformance to the 5th edition (2014) FBC and of no financial interest issued by Wendler Engineering Services, Inc., dated 09/09/2015, signed and sealed by Richard A. Baumann, P.E.
2. Statement letter of code conformance to 2010 FBC, issued by Wendler Engineering Services, Inc., dated 05/14/2012, signed and sealed by Richard A. Baumann, P.E.
3. Statement letter of no financial interest, issued by Wendler Engineering Services, Inc., dated 09/17/2010, signed and sealed by Richard A. Baumann, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 15-0714.05

Expiration Date: March 10, 2016
Approval Date: November 19, 2015

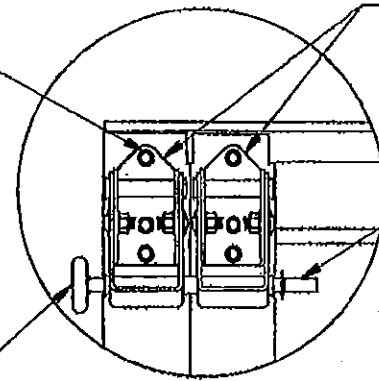


LIGHT COMMERCIAL TOP FIXTURE MOUNTING DETAIL

1/4" X 5/8" SELF-TAPPING SCREW (3) PER TOP FIXTURE

ROLLER KEEPER SEE DETAIL ON SHEET 3

LONG STEM ROLLER SEE DETAIL ON SHEET 3



HEAVY COMMERCIAL TOP FIXTURE MOUNTING DETAIL

TOP FIXTURE SEE DETAIL ON SHEET 3

ROLLER KEEPER SEE DETAIL ON SHEET 3

SECTION THICKNESS = 2"

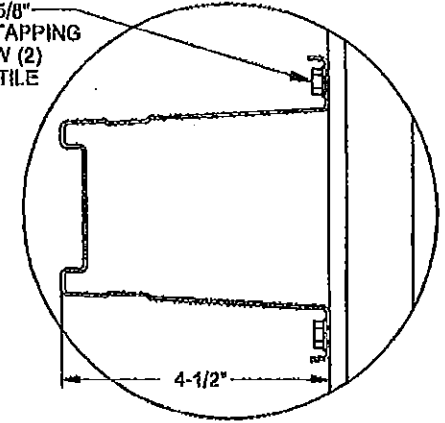
SKIN THICKNESS
STEELFORM STANDARD
24 GA (.023 MIN)
STEELFORM OPTIMA
20 GA (.035 MIN)
MINIMUM YIELD
STRENGTH = 53470 PSI

1/2" DEEP REINFORCING RIB (2) PER SECTION

SECTION DETAIL

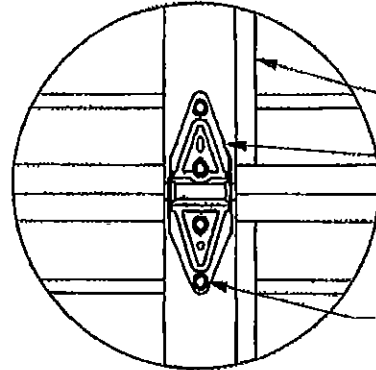
TONGUE AND GROOVE SECTION JOINT

1/4" X 5/8" SELF-TAPPING SCREW (2) PER STILE



BOX STRUT MOUNTING DETAIL

18 GA (.049 MIN)
80 KSI MIN TENSILE STEEL
(1) PER SECTION

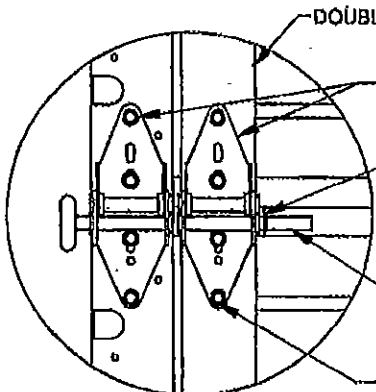


CENTER HINGE MOUNTING DETAIL

CENTER STILE .055 MIN

CENTER HINGE SEE DETAIL ON SHEET 3

1/4" X 5/8" SELF-TAPPING SCREW (4) PER CENTER HINGE



EDGE HINGE MOUNTING DETAIL

DOUBLE END STILE .055 MIN

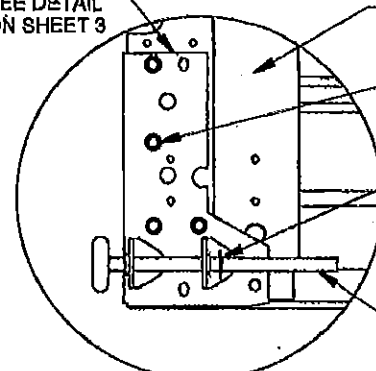
EDGE HINGE SEE DETAIL ON SHEET 3

ROLLER KEEPER SEE DETAIL ON SHEET 3

LONG STEM ROLLER SEE DETAIL ON SHEET 3

1/4" X 5/8" SELF-TAPPING SCREW (4) PER EDGE HINGE

CORNER BRACKET SEE DETAIL ON SHEET 3



CORNER BRACKET MOUNTING DETAIL

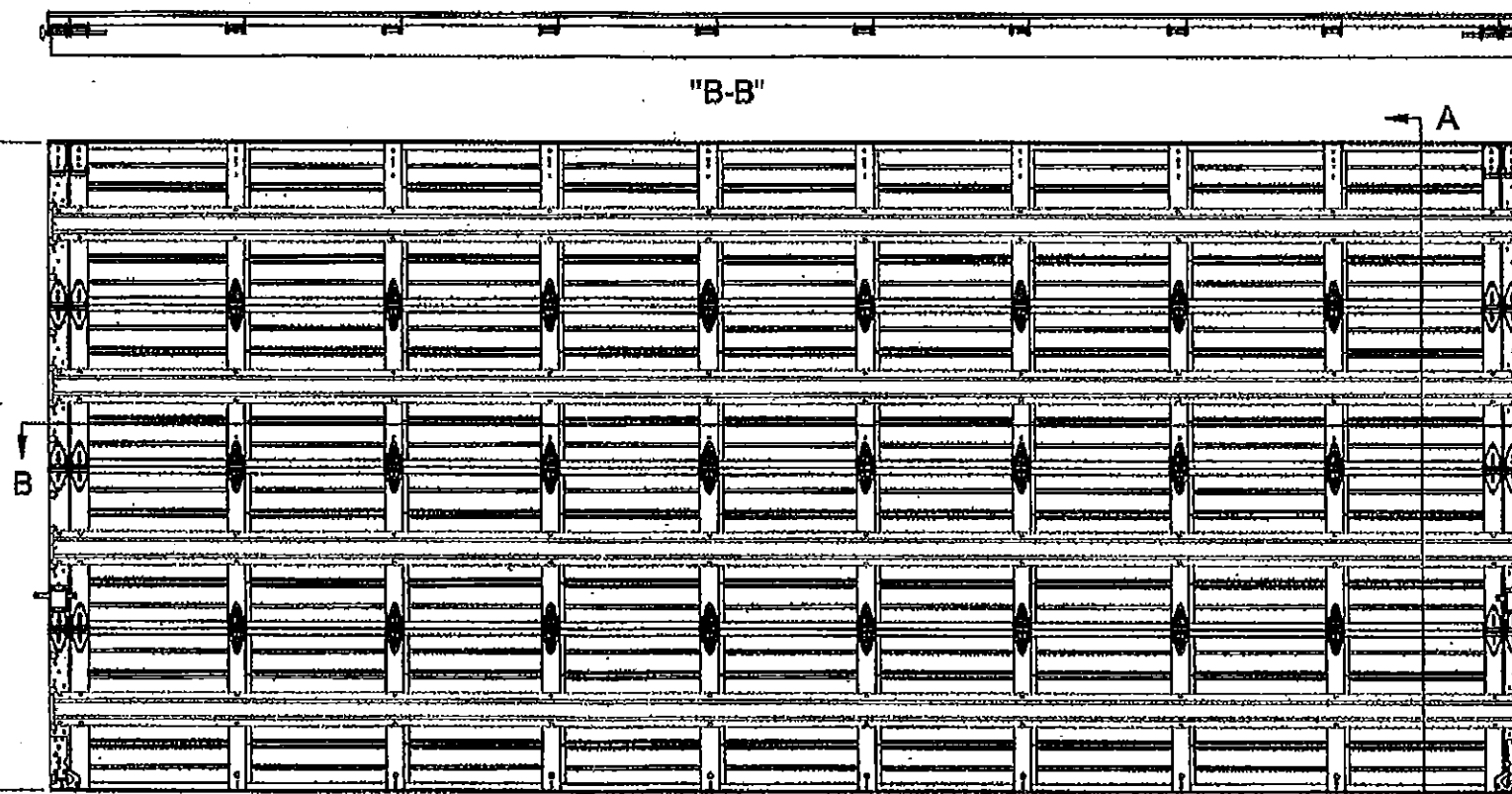
DOUBLE END STILE .055 MIN

1/4" X 5/8" SELF-TAPPING SCREW (4) PER CORNER BRACKET

ROLLER KEEPER SEE DETAIL ON SHEET 3

LONG STEM ROLLER SEE DETAIL ON SHEET 3

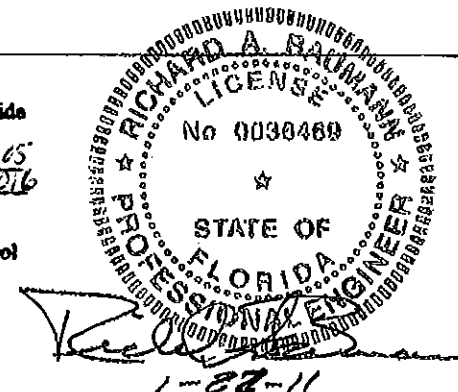
DOOR HEIGHT
MAXIMUM 24' - 0"
24" MAXIMUM
SECTION HEIGHT



TRACK AND COUNTER BALANCE ASSEMBLIES
WERE OMITTED FROM ALL DETAILS ON THIS
PAGE FOR CLARITY. SEE SHEET 2 FOR
TRACK AND COUNTER BALANCE DETAILS

18' - 2" MAX DOOR WIDTH
SEE SHEET 2 FOR OTHER DOOR WIDTHS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0714.05
Expiration Date 02/10/2016
By [Signature]
Miami Trade Product Control



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0517.17
Expiration Date 03/10/2016
By [Signature]
Miami Trade Product Control

Approved as complying with the
Florida Building Code
Date 03/10/2011
NOAH 10-0921.06
Miami Trade Product Control
By [Signature]

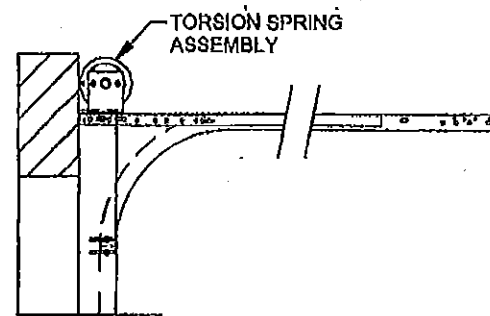
DOORS TESTED PER TAS 202
FOR
STATIC AIR PRESSURE
PER TAS 201, TAS 203
FOR
LARGE MISSILE IMPACT AND
CYCLIC WIND PRESSURE

| DOOR WIDTH | DESIGN LOAD |
|------------|---------------|
| 8' - 2" | + 80.0 - 85.8 |
| 10' - 2" | + 80.0 - 74.5 |
| 11' - 2" | + 80.0 - 74.5 |
| 12' - 2" | + 80.0 - 74.5 |
| 13' - 2" | + 40.0 - 52.0 |
| 14' - 2" | + 40.0 - 52.0 |
| 15' - 2" | + 40.0 - 52.0 |
| 16' - 2" | + 40.0 - 52.0 |
| 17' - 2" | + 40.0 - 52.0 |
| 18' - 2" | + 40.0 - 52.0 |

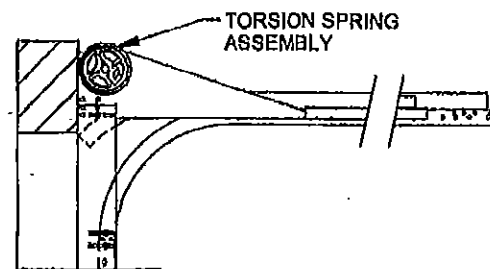
| | | | | | | |
|-----|---------------------------------|----------|----------------|-----------------------------------|----------------|-----------------|
| C | UPDATED PER DADE COUNTY REQUEST | 5807.02 | 01/10/11 | SCALE NOTED OR NONE | DATE: 02/26/10 | ECN NO: 5807.01 |
| B | RELEASED TO PRODUCTION | 5807.01 | 01/10/10 | DESIGNED BY: DAVID H. G. WEDEKIND | DATE: 02/26/10 | ECN NO: 5807.01 |
| A | PRELIMINARY RELEASE | 02/26/10 | DATE: 02/26/10 | DESIGNED BY: DAVID H. G. WEDEKIND | DATE: 02/26/10 | ECN NO: 5807.01 |
| REV | DESCRIPTION | ECN NO. | DATE | ECN NO: 5807.01 | DATE: 02/26/10 | ECN NO: 5807.01 |

RAYNER
CARAGE DOORS

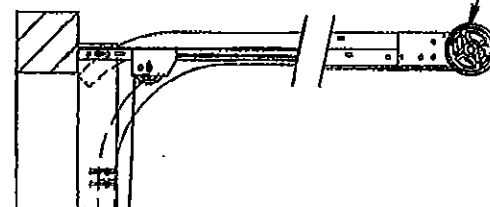
mm: SPEC. WIND LOAD
STEELFORM STANDARD
24 GAUGE AND 20 GAUGE
NO. P-3313
1 of 4
REV



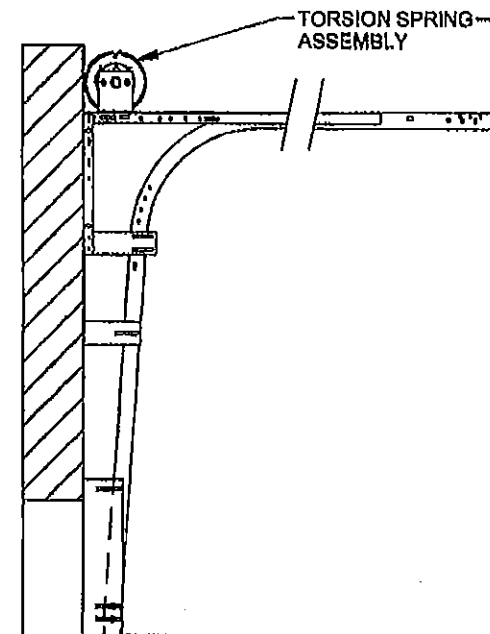
NORMAL HEADROOM TRACK
2" TRACK ANGLE MOUNT SHOWN
3" TRACK ANGLE MOUNT AVAILABLE



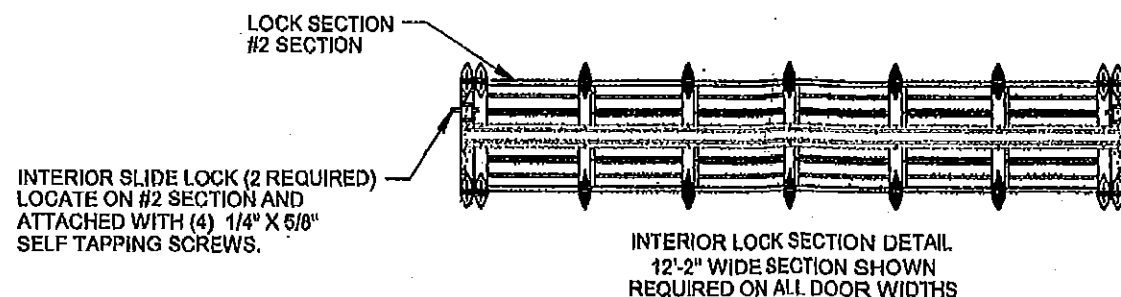
FRONT MOUNT LOW HEADROOM TRACK
2" TRACK ANGLE MOUNT SHOWN
3" TRACK ANGLE MOUNT AVAILABLE



REAR MOUNT LOW HEADROOM TRACK
2" TRACK ANGLE MOUNT SHOWN
3" TRACK ANGLE MOUNT AVAILABLE

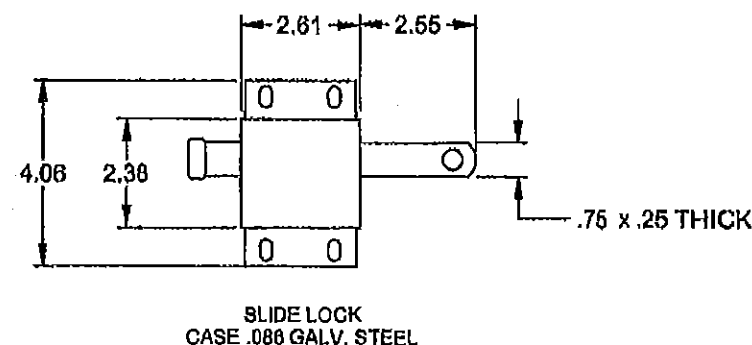


LIFT CLEARANCE TRACK
2" TRACK ANGLE MOUNT SHOWN
3" TRACK ANGLE MOUNT AVAILABLE

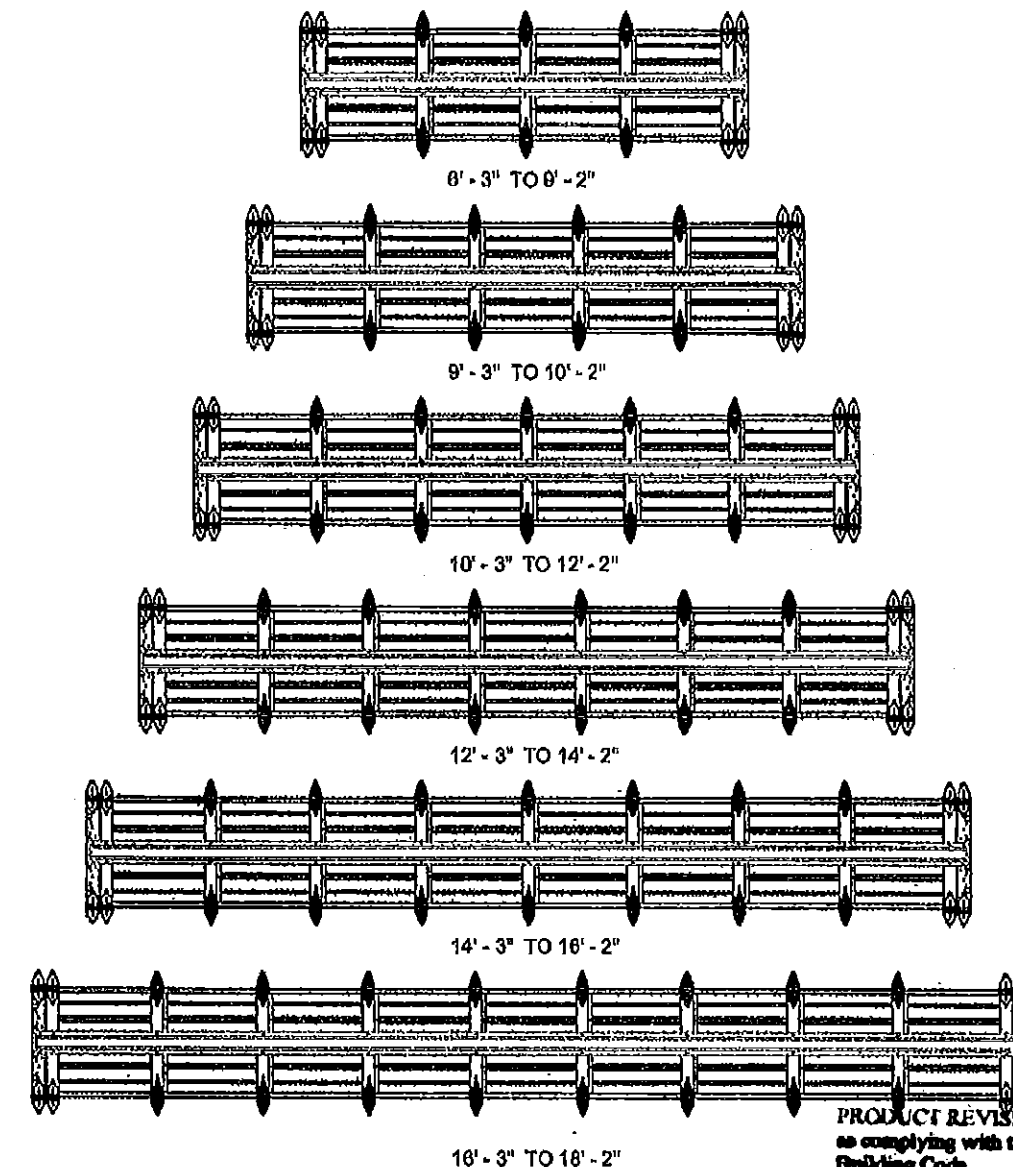


INTERIOR SLIDE LOCK (2 REQUIRED)
LOCATE ON #2 SECTION AND
ATTACHED WITH (4) 1/4" X 5/8"
SELF TAPPING SCREWS.

INTERIOR LOCK SECTION DETAIL
12'-2" WIDE SECTION SHOWN
REQUIRED ON ALL DOOR WIDTHS



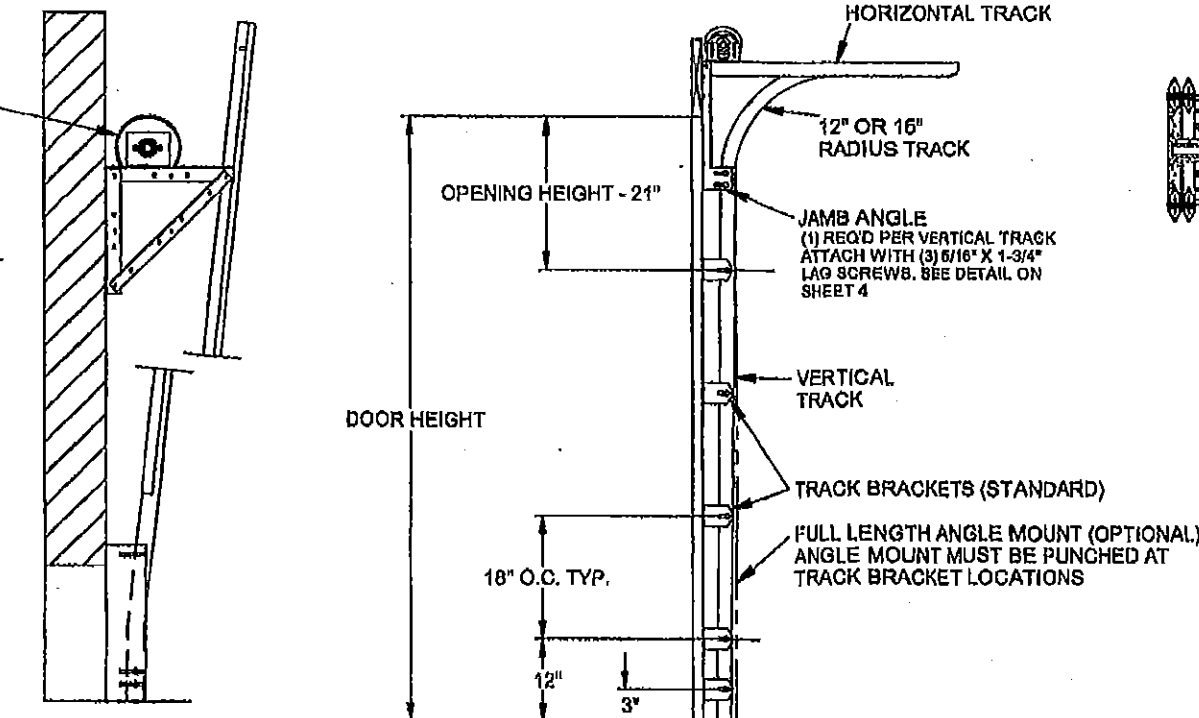
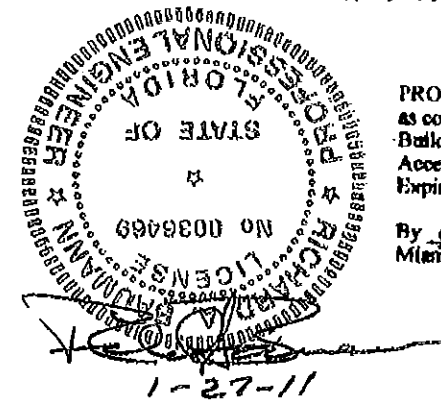
SLIDE LOCK
CASE .088 GALV. STEEL



PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0719.05
Expiration Date 03/10/2016
By *[Signature]*
Miami Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0517.17
Expiration Date 03/10/2016
By *[Signature]*
Miami Dade Product Control

Approved as complying with the
Florida Building Code
Date 03/10/2011
NOAH 10-0727.06
Miami Dade Product Control
By *[Signature]*

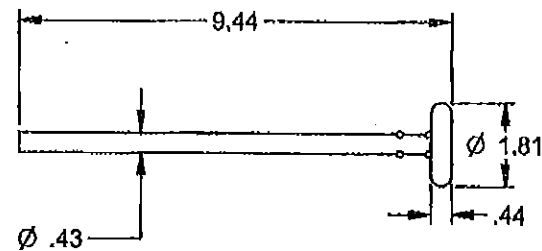


TYPICAL TRACK INSTALLATION

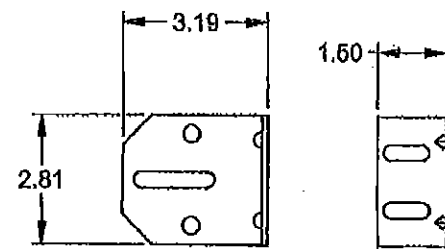
| | | | | |
|------|-------------|----------|------|----------|
| REV. | DESCRIPTION | CHG. NO. | DATE | ECN. NO. |
| | | | | |
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| | | | | |
| | | | | |

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|----------------------|----------------|
| SCALE: NOTED OR NONE | DATE: 02/26/10 |
| DRAWN BY: O.WEDKNO | ECN. NO.: |
| CHECKED BY: GW | |

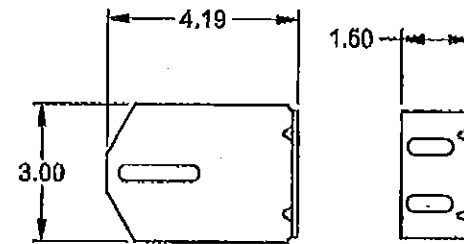
| | |
|--|---|
| RAYNER GARAGE DOORS FOR THE DOOR MANUFACTURER | TITLE: SPEC. WIND LOAD STEELFORM STANDARD 24 GAUGE AND 20 GAUGE |
| NO. P-3313 | SHEET 2 OF 4 |



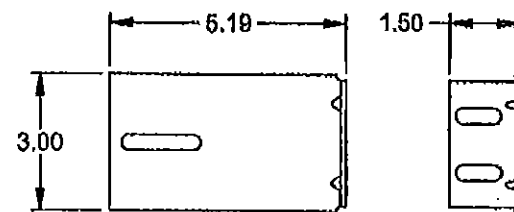
SCALE 1:2
TRACK ROLLER



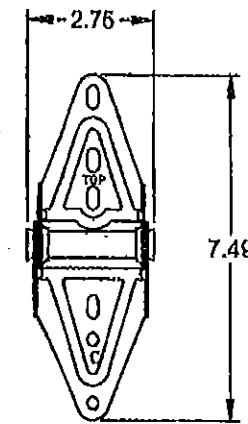
SCALE 1:2
3" TRACK BRACKET
.116 GALV. STEEL



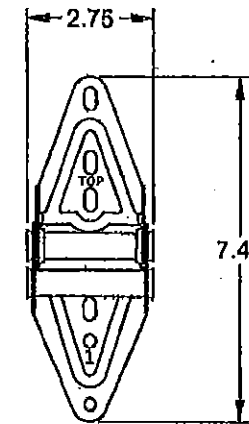
SCALE 1:2
4" TRACK BRACKET
.116 GALV. STEEL



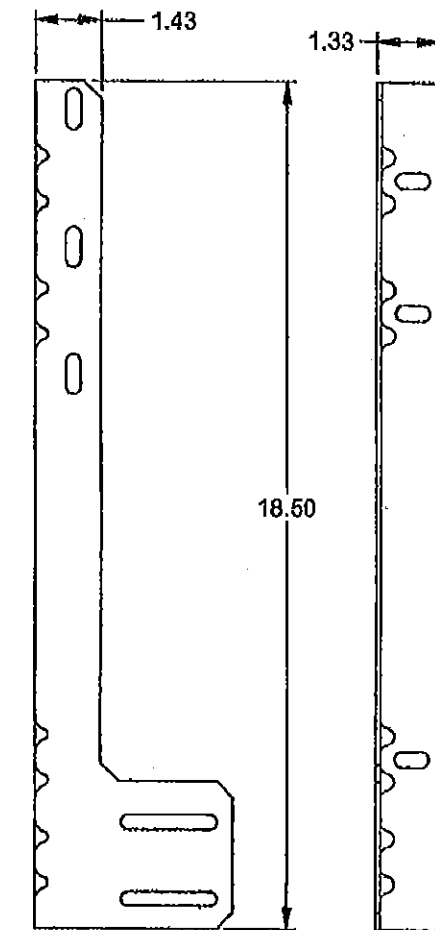
SCALE 1:2
5" TRACK BRACKET
.116 GALV. STEEL



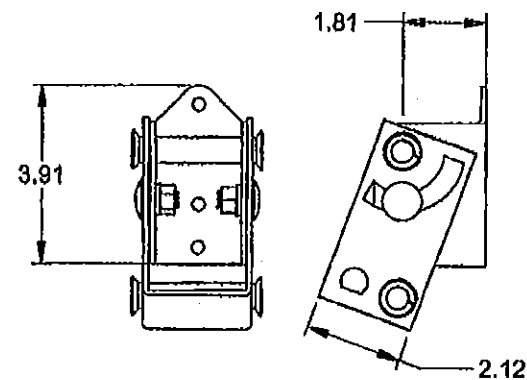
SCALE 1:2
CENTER HINGE
.045 GALV. STEEL



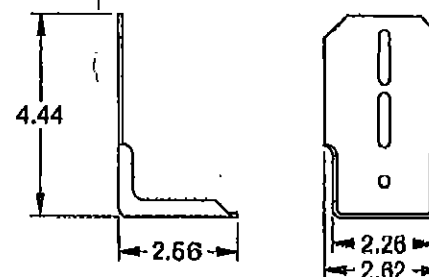
SCALE 1:2
EDGE HINGE
.088 GALV. STEEL



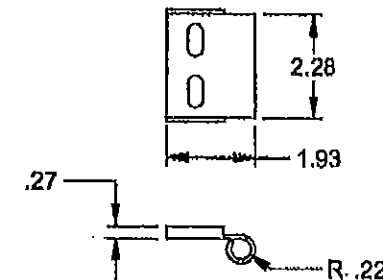
SCALE 1:2
JAMB ANGLE
.078 GALV. STEEL



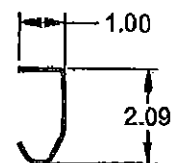
SCALE 1:2
HEAVY COMMERCIAL TOP FIXTURE
.116 GALV. STEEL



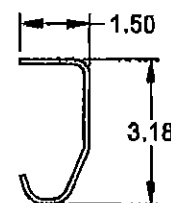
SCALE 1:2
LIGHT COMMERCIAL TOP FIXTURE
.086 GALV. STEEL



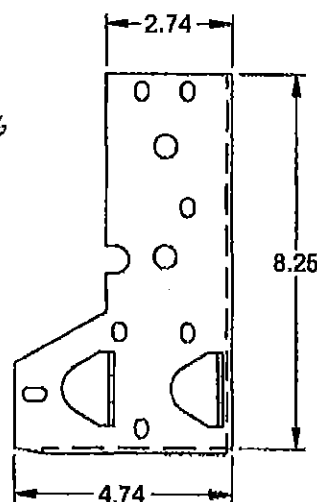
SCALE 1:2
ROLLER CARRIER
.116 GALV. STEEL
ATTACHED TO LIGHT COMMERCIAL TOP FIXTURE
WITH (2) TRACK BOLTS AND WHIZ NUTS



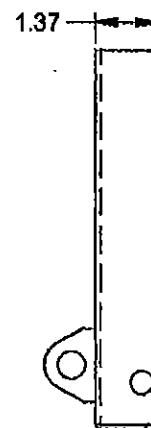
SCALE 1:2
2" TRACK
.086 GALV. STEEL



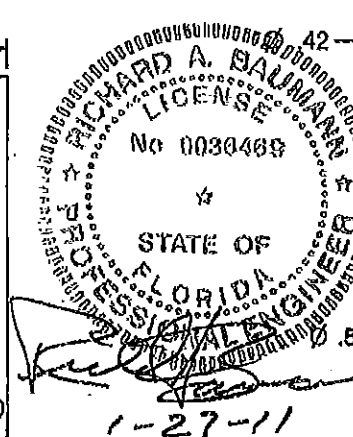
SCALE 1:2
3" TRACK (OPTIONAL)
.105 GALV. STEEL



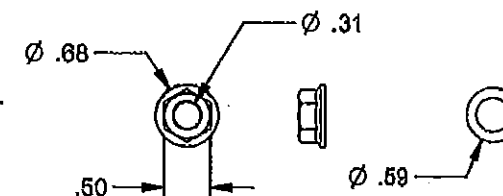
SCALE 1:2
CORNER BRACKET
.116 GALV. STEEL



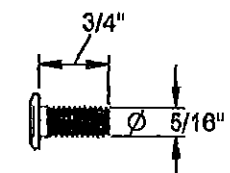
SCALE 1:1
SHEET METAL SCREW



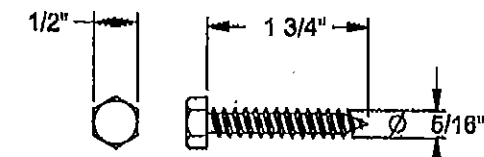
SCALE 1:1
RETAINING NUT



SCALE 1:1
HEX FLANGE NUT



SCALE 1:1
TRACK BOLT

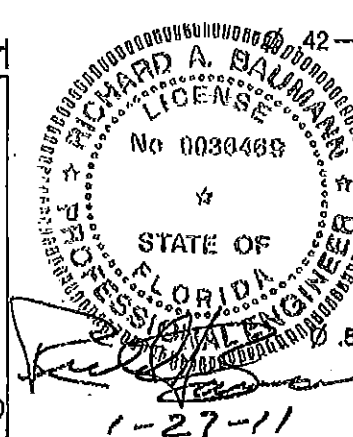


SCALE 1:1
HEX HEAD LAG SCREW

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0714-05
Expiration Date 03/10/2016
By *[Signature]*
Miami Date Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0517-17
Expiration Date 03/10/2016
By *[Signature]*
Miami Date Product Control

Approved as complying with the
Florida Building Code
Date 03/10/2011
NOAH 10-0921-06
Miami Date Product Control
By *[Signature]*



| | | | |
|-----------------------|-------------|------------------------|------|
| SCALE NOTED ON NOTE | | | |
| DRAWN BY: O.V. DECKHO | | | |
| CHECKED BY: GW | | | |
| DATE: 02/28/10 | | | |
| REV. | DESCRIPTION | REV. NO. | DATE |
| | | | |
| | | | |
| | | | |
| | | | |
| RAYNOR | | TITLE: SPEC. WIND LOAD | |
| GARAGE DOORS | | STEELFORM STANDARD | |
| NO. P-3313 | | 24 GAUGE AND 20 GAUGE | |
| SHEET | | REV | |
| 3 of 4 | | C | |

1" LAP JAMB FOR NEGATIVE LOADS

THREAD CUTTING SCREW
5/16" X 5/8" WITH 5/16"
FLAT WASHER. SEE
JAMB ATTACHMENT
DETAIL FOR SPACING

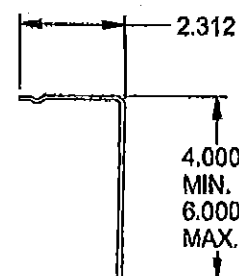
TRACK BOLT 5/16" X 3/4"
SEE DETAIL ON SHEET 3

ANGLE MOUNT
SEE ANGLE MOUNT DETAIL

VERTICAL TRACK
2" TRACK TO BE .086 MIN
GALVANIZED STEEL
3" TRACK TO BE .105 MIN
GALVANIZED STEEL
SEE DETAIL ON SHEET 3

STEEL JAMB

STEEL JAMB
STRUCTURAL STEEL BY
OTHERS, 3/16" MIN
THICKNESS



ANGLE MOUNT
.086 MIN. - .116 MAX
GALVANIZED STEEL
SCALE 1:2
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-074-05
Expiration Date 03/10/2016
By [Signature]
Miami Dade Product Control

1" LAP JAMB FOR NEGATIVE LOADS

SEE JAMB ATTACHMENT
DETAIL FOR SPACING

HEX HEAD LAG SCREW
5/16" X 1-3/4" WITH 5/16" FLAT
WASHER. (2) PER BRACKET
SEE DETAIL ON THIS SHEET
TRACK BOLT 5/16" X 3/4"
SEE DETAIL ON SHEET 3
ANGLE MOUNT
SEE ANGLE MOUNT DETAIL

VERTICAL TRACK
2" TRACK TO BE .086 MIN
GALVANIZED STEEL
3" TRACK TO BE .105 MIN
GALVANIZED STEEL
SEE DETAIL ON SHEET 3

ANGLE MOUNT ON WOOD JAMB
2" TRACK ANGLE MOUNT SHOWN
3" TRACK ANGLE MOUNT AVAILABLE

MASONRY OR WOOD STRUCTURE
2X6 MINIMUM, TREATED IF
MOUNTED TO MASONRY

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0517-17
Expiration Date 03/10/2016
By [Signature]
Miami Dade Product Control

Approved as complying with the
Florida Building Code
Date 03/10/2011
NOAH 10-0421-06
Miami Dade Product Control

By [Signature]

1" LAP JAMB FOR NEGATIVE LOADS

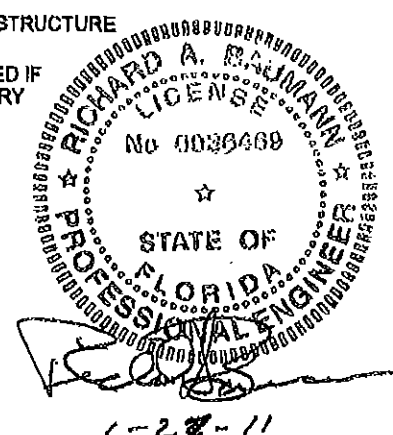
SEE JAMB
ATTACHMENT DETAIL
FOR SPACING

HEX HEAD LAG SCREW
5/16" X 1-3/4" WITH 5/16" FLAT
WASHER. (2) PER BRACKET
SEE DETAIL ON SHEET 3
TRACK BOLT 5/16" X 3/4"
SEE DETAIL ON SHEET 3
TRACK BRACKET
SEE SPACING CHART FOR
LOCATIONS. SEE DETAIL
ON SHEET 2

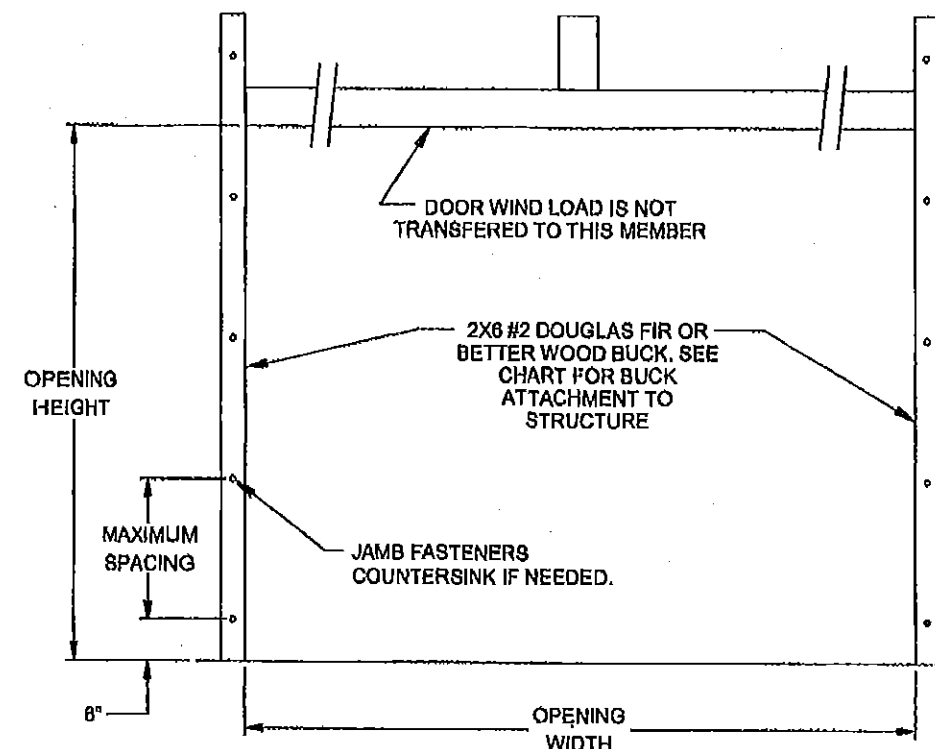
VERTICAL TRACK
2" TRACK TO BE .086 MIN
GALVANIZED STEEL
3" TRACK TO BE .105 MIN
GALVANIZED STEEL
SEE DETAIL ON THIS SHEET

BRACKET MOUNT ON WOOD JAMB

MASONRY OR WOOD STRUCTURE
2X6 MINIMUM, TREATED IF
MOUNTED TO MASONRY



1-27-11



JAMB ATTACHMENT

| 1/4" ITW BULDEX TAPCON | | | | |
|----------------------------------|-----------|---------------|------------------------|---------------------------|
| JAMB TYPE | EMBEDMENT | EDGE DISTANCE | ALLOWABLE TENSION LOAD | MAXIMUM ON CENTER SPACING |
| 2000 PSI CONCRETE | 1-3/4" | 2-1/2" | 505 | 16-1/2" |
| 3000 PSI CONCRETE | 1-3/4" | 2-1/2" | 550 | 18" |
| 5/16" ITW BULDEX TAPCON | | | | |
| 3000 PSI CONCRETE | 1-3/4" | 2 3/16" | 563 | 18-1/2" |
| POWER ANCHOR - 3/8" WEDGE ANCHOR | | | | |
| 2000 PSI CONCRETE | 1-5/8" | 1-7/8" | 360 | 11-3/4" |
| | 3" | 1-7/8" | 788 | 25-1/4" |
| 5/16" LAG SCREW | | | | |
| SPRUCE, PINE, FIR (G = .42) | 1-1/2" | 1-3/4" | 307 | 10" |
| DOUGLAS FIR (G = .46) | 1-1/2" | 1-3/4" | 352 | 11-1/2" |
| SOUTHERN YELLOW PINE (G = .55) | 1-1/2" | 1-3/4" | 480 | 15" |
| 3/8" LAG SCREW | | | | |
| SPRUCE, PINE, FIR (G = .42) | 1-1/2" | 1-3/4" | 352 | 11-1/2" |
| DOUGLAS FIR (G = .46) | 1-1/2" | 1-3/4" | 403 | 13-1/4" |
| SOUTHERN YELLOW PINE (G = .55) | 1-1/2" | 1-3/4" | 528 | 17-1/4" |
| 5/16 X 5/8 THREAD CUTTING SCREW | | | | |
| STEEL A 36 | 3/16" | 1/2" | 1048 | 34-1/2" |

JAMB ATTACHMENT NOTES

- 1/4" DIAMETER ANCHORS REQUIRE 5/8" MIN. O.D. STEEL WASHER.
- 5/16" AND 3/8" DIAMETER FASTENERS REQUIRE 7/8" MIN O.D. STEEL WASHER.
- MAXIMUM POSITIVE LOAD PER JAMB = $(18'-2" \times 40.0 \text{ PSF}) / 2 = 363 \text{ LBS PER FOOT}$
- MAXIMUM NEGATIVE LOAD PER JAMB = $(18'-2" \times 52.0 \text{ PSF}) / 2 = 472 \text{ LBS PER FOOT}$
- DESIGN OF THE SUPPORTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE BUILDING DESIGNER AND SHALL BE DESIGNED FOR THE JAMB LOADS LISTED IN NOTES 3 AND 4.

| | | |
|----------------------|----------------|-----------------|
| SCALE: NOTED OR NONE | DATE: 02/28/10 | BY: [Signature] |
| DESIGNED BY: GW | CHECKED BY: GW | DATE: 02/28/10 |
| DATE: 02/28/10 | DATE: 02/28/10 | DATE: 02/28/10 |
| DATE: 02/28/10 | DATE: 02/28/10 | DATE: 02/28/10 |

RAYMOND
GARAGE DOORS
DOOR & WINDOW
DOOR & WINDOW

SEE SPEC. WIND LOAD
STEELFORM STANDARD
24 GAUGE AND 20 GAUGE
No. P-3313
4 of 4
REV C